MASSACHUSETTS
GHSB/MassSAFE Crash Data Analysis and Technical Assistance Center

Problem Identification

Since traffic data are the primary source of our knowledge about the traffic safety environment, human behavior, and vehicle performance, traffic safety professionals require data that are accurate, complete, uniform, integrated, and accessible. Massachusetts traffic safety stakeholders did not have access to reliable crash-related data statistics and analysis. Because there was no centralized location for crash data, traffic safety professionals were required not only to understand how to use crash data independently, but also to identify data quality issues and remedies for those issues. Exposure and normalizing data such as population, number of licensed drivers, vehicle miles traveled (VMT), and guidelines for their use were not centrally available to traffic safety professionals for use in detailed data analysis.

Goals and Objectives

The goal of the *Governor's Highway Safety Bureau (GHSB)/MassSAFE Crash Data Analysis and Technical Assistance Center* is to help reduce the incidence of death and injury by increasing the flow of timely, accurate, uniform, complete, and accessible traffic safety data.

The project's objectives include:

- Support GHSB's Traffic Safety Improvement Plan by providing traffic safety and related statistics;
- Improve problem identification timeliness, accuracy, and coordination for program planning and evaluation;
- Make traffic safety professionals' efforts more effective by providing necessary data and tools;
- Identify traffic safety trends and issues though analyzing Data Warehouse data;
- Respond to requests from GHSB and other stakeholders for quantitative information about traffic safety;
- Provide technical and analytical assistance to GHSB staff and stakeholders through issue reports, fact sheets, and position papers;
- Train GHSB staff and stakeholders to use traffic safety data; and
- Respond to queries from data presentation tool accessed by Internet users.

Strategies and Activities

The *GHSB/MassSAFE Crash Data Analysis and Technical Assistance Center implemented the following strategy to achieve its goals and objectives:*

- Centralized data in the Data Warehouse housed at the University of Massachusetts to enable the GHSB and other stakeholders seeking to understand Massachusetts crashes through using crash-related data to receive technical assistance.
- Concentrated on three areas in FY2003: reports to GHSB, technical assistance to stakeholders and traffic safety professionals, and crash data research.
- Gathered exposure/normalizing data and develop guidelines for using those data in crash-data analysis and research to ensure comprehensive assistance to stakeholders, and understanding data housed in the Data Warehouse.

Results

The *GHSB/MassSAFE Crash Data Analysis and Technical Assistance Center* achieved the following results:

Provided reports based on state-level crash data, such as:
- Traffic Safety Fact Sheets for 2000 and 2001
- Position papers on five topics
- Crash books and injury characteristic chart books for the 2001 serious injury data
- Project Annual Report
- Report on 2001 fatal data from the Fatality Analysis Reporting System (FARS)

Responded with on-demand support to 70 requests from traffic safety professionals regarding Massachusetts crash data, including:
- Presentation on pedestrian injuries, related data, and GHSB programs at the Massachusetts Bicycle and Pedestrian Conference
- Problem identification for the 2002 Annual Report
- Planning GHSB/MassSAFE online query tool
- Training workshops for program researchers
- Planning regarding how to use the 2001 crash data
- Memo on problems associated with the crash data
- Problem identification for the 2004 Highway Safety Plan
- Acquisition of normalizing data from Massachusetts Institute for Social and Economic Research (MISER)
- Maps for online query tool planning and development

Researched topics to understand more in-depth aspects of crash data analysis, such as:

- Crash reporting tools
- Normalizing data to be used in conjunction with crash data
- Crash data analysis across 12 years
- Other states' highway safety plans
- All crash, license, driver, and citation data
- University of Massachusetts data mining resources
- Simple query tools